

REMARKS

After entry of this amendment, the pending claims are: claims 31-41, 43-44, 46-65 and 67-74.

Two dependent claims were canceled and two were added, and thus the number of pending claims remains unchanged.

The amendment to independent claim 31 is supported at least by Figures 1-3. No new matter has been added to this claim.

As amended, independent claim 31 recites in pertinent part: "one or more elongated combteeth spines coupled to and extending away from sides of the mirror in a direction parallel to an axis of rotation of the moving combteeth assembly." This is not taught or suggested by Yamada, and Yamada provides no motivation or suggestion to so modify its disclosed apparatus. Yamada teaches "opposing end portions", "opposing areas" and "electrode sections of the mirror" (See e.g. Yamada, column 7, lines 43-63, and Figures 7A). Figure 7A shows these "end portions" as being part of the mirror and not extending away from the mirror in a direction parallel to an axis of rotation of the moving combteeth assembly. If the end portions of Yamada are considered spines, the only direction they extend in, if at all, is in a direction perpendicular to the axis of rotation.

Further, this is an important distinction in that the structure claimed in the present invention makes the size of the mirror independent from the size and location of the combteeth. The mirror can be lengthened perpendicular to the axis of rotation without limiting the maximum angle of rotation. The claimed invention allows a greater angle of rotation than that of a system according to Yamada for a given mirror length, because the combteeth are placed closer to the rotational axis of the moving combteeth assembly.

Respectfully, Yamada does not teach the invention to which independent claim 31 is directed, nor the claims that depend from claim 31.

New dependent claim 73 is supported at least by Figures 1-3. No new matter has been added to this claim.

Claim 73 recites in pertinent part: "the one or more elongated combteeth spines each has a longitudinal axis extending in a direction away from a respective side of the mirror." This is not taught or suggested by Yamada, and Yamada provides no motivation or suggestion to so modify its disclosed apparatus. If the end portions shown in Figure 7a of Yamada (as detailed above) are considered spines, their longitudinal axes do not extend away from the sides of the mirror at all - they run parallel to it and are a part of the mirror.

We note for the examiner that "longitudinal" as used in claim 73 is defined in the American Heritage College Dictionary, 3rd Edition, page 799, as: "of or relating to longitude or length, ... placed or running lengthwise."

Respectfully, Yamada does not teach the invention to which claim 73 is directed.

The amendment to independent claim 52 is supported at least by Figures 1-3. No new matter has been added to this claim.

As amended, independent claim 52 recites in pertinent part: "a pair of combteeth spines coupled to and extending in opposite directions away from sides of the mirror and in directions parallel to an axis of rotation of the moving combteeth assembly." This is not taught or suggested by Yamada, and Yamada provides no motivation or suggestion to so modify its disclosed apparatus. As noted above, Yamada teaches "opposing end portions", "opposing areas" and

"electrode sections of the mirror". Yamada's Figure 7A shows these "end portions" as being part of the mirror and not extending in directions parallel to an axis of rotation of the moving combteeth assembly. If the end portions of Yamada are considered spines, the only direction they extend in, if at all, is in a direction perpendicular to the axis of rotation. Further, as explained above in greater detail for claim 31, these are important distinctions for the mechanical operation of the claimed structure as well as for the optical dimensions of the mirror.

Respectfully, Yamada does not teach the invention to which independent claim 52 is directed, nor the claims that depend from claim 52.

New dependent claim 74 is supported at least by Figures 1-3. No new matter has been added to this claim.


Claim 74 recites in pertinent part: "the pair of combteeth spines each has a longitudinal axis extending in opposite directions away from a respective side of the mirror." As stated above under claim 73, "longitudinal" is defined as "of or relating to longitude or length, ... placed or running lengthwise." Such combteeth spines having longitudinal axes are not taught or suggested by Yamada, and Yamada provides no motivation or suggestion to so modify its disclosed apparatus. If the end portions shown in Figure 7a of Yamada (as detailed above) are considered spines, their longitudinal axes do not extend away from the sides of the mirror at all - they run parallel to it and are a part of the mirror.

Respectfully, Yamada does not teach the invention to which claim 74 is directed.

In light of the above amendments and remarks, the Applicant respectfully requests that the Examiner reconsider this application with a view towards allowance. The Examiner is invited to call the undersigned attorney if a telephone call could help resolve any remaining items.

Respectfully submitted,

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Appendix A
Changes to the Claims

The rewritten claims were revised as follows:

31. (Amended) A torsional electrostatic combdrive, comprising:

a stationary combteeth assembly having first combteeth;
and

a moving combteeth assembly, including a mirror and one or more elongated combteeth spines coupled to and extending away from sides of the mirror in a direction parallel to an axis of rotation of the moving combteeth assembly, the one or more combteeth spines each having second combteeth extending therefrom for engaging the first combteeth.

52. (amended) A torsional electrostatic combdrive, comprising:

a stationary combteeth assembly having first combteeth;
and

a moving combteeth assembly, including a mirror and a pair of combteeth spines coupled to and extending in opposite directions away from sides of the mirror and in directions parallel to an axis of rotation of the moving combteeth assembly, the combteeth spines each having second combteeth extending therefrom for engaging the first combteeth.

73. (New) The torsional electrostatic combdrive of claim 31, wherein the one or more elongated combteeth spines each has a longitudinal axis extending in a direction away from a respective side of the mirror.

74. (New) The torsional electrostatic combdrive of claim 52, wherein the pair of combteeth spines each has a longitudinal axis extending in opposite directions away from a respective side of the mirror.

SN: 09/584,835
9840-0055-999

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Amendment, Appendix A

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